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REQUEST FOR ACCESS OF ABANDONED APPLICATION UNDER 37 CFR 1.14(a)
Backstrom et al
Application Number Filed 08/736-267 Ha/24/96
Group Art Unit Examiner
Paper No. # 39
Assistant Commissioner for Patents Washington, DC 20231
I hereby request access under 37 CFR 1.14(a)(3)(iv) to the application file record of the above- identified ABANDONED application, which is: (CHECK ONE:
identified Aura States Patent Number
(A) referred to in Office Communication that is open to public inspection as set forth in 37 CFR 1.11 of on page of on page of Application No filed on page of on page on page on page of on page
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United States Patent [19]

Bäckström et al.

[75]

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Date of Patent:

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COMPOSITIONS FOR INHALATION	4,746,508	5/1988	Kagatani et al	42
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This patent is subject to a terminal dis-[*] Notice: claimer.

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References Cited [56]

U.S. PATENT DOCUMENTS

3,014,844	12/1961	Thiel .
4,524,769	6/1985	Wetterlin 128/203.15
4,534,345	8/1985	Wetterlin 128/203.15
4,548,922	10/1985	Carey et al 514/4
4,613,500	9/1986	Suzuki et al 424/85.4
4,668,218	5/1987	Virtanen 604/58

4.690.952	9/1987	Kagatani et al	514/11
4,746,508	5/1988	Carey et al	424/88
4,788,221	11/1988	Kagatani et al	514/12

952008A

FOREIGN PATENT DOCUMENTS

43556/93	1/1994	Australia.
0 023 359	7/1980	European Pat. Off
0 055 041	12/1981	European Pat. Off
0 122 036	10/1984	European Pat. Off
0 200 383	4/1986	European Pat. Off
0 225 189	11/1986	European Pat. Off
0 272 097	6/1988	European Pat. Off
0 360 340	3/1990	European Pat. Off
0 455 463	11/1991	European Pat. Off

(List continued on next page.)

OTHER PUBLICATIONS

Olanoff et al., "Method to Enhance Intranasal Peptide Delivery", in "Controlled-Release Technology Pharmaceutical Applications", Lee et al., Ed., Published 1987 by The American Chemical Society, pp. 301-309.

Mishima et al., "Studies on the Promoting Effects of Medium Chain Fatty Acid Salts on the Nasal Absorption of Insulin in Rats", J. Pharm. Sci., vol. 10, issued 1987, pp. 624-631.

(List continued on next page.)

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ABSTRACT [57]

A pharmaceutical composition including a mixture of active compounds (A) a pharmaceutically active polypeptide, and (B) an enhancer compound which enhances the systemic absorption of the polypeptide in the lower respiratory tract of a patient, the mixture being in the form of a dry powder for inhalation in which at least 50% of the total mass of the active compounds consists of primary particles having a diameter less than or equal to about 10 microns, the primary particles optionally being formed into agglomerates.

49 Claims, 2 Drawing Sheets

